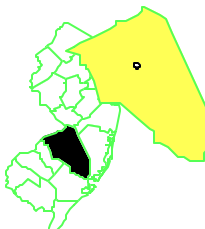


EWAN PROPERTY

NEW JERSEY

EPA ID# NJD980761365



EPA REGION 2
CONGRESSIONAL DIST. 03
Burlington County
Wallingford Way, Shamong Township

Other Names:
Shamong Township Drum Dump

Site Description

The Ewan Property Site consists of 43 heavily wooded acres in Shamong Township. The Site is located within the Central Pine Barrens portion of the New Jersey Pinelands. The property is surrounded by forest, agricultural land, and residential areas. Groundwater within one mile of the site is used for domestic water supply, and for agricultural irrigation. Several residential housing developments containing approximately several hundred single family homes are located within one mile of the site, all of which rely on private wells. An intermittent stream and extensive wetlands are located adjacent to the Site.

Site investigations revealed that during the early to mid-1970s, between 500 to 8,000 drums containing hazardous industrial wastes were emptied or buried on-Site in trenches and pits which were subsequently backfilled with soil. Soil and groundwater sampling indicated the presence of volatile organic compounds (VOCs), semi-volatiles, and metals in Site soils and groundwater. An extensive network of both on and off-site groundwater monitoring wells indicates that groundwater contamination has not migrated beyond the Site boundaries. Site activities are ongoing.

Site Responsibility: This Site is being addressed through Federal, State and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 09/01/83

Final Date: 09/01/84

Threats and Contaminants



Monitoring wells indicate that the Site includes a contaminated groundwater plume of VOCs, including acetone, toluene, xylene, and benzene, among others, and the heavy metals arsenic, chromium and aluminum. To date, no contaminants have been detected in off-Site residential wells. Two aquifers below the Site are hydraulically linked. Local groundwater flows in a southerly direction. Site soils are contaminated with the above



VOCs and heavy metals. EPA has determined that drinking contaminated groundwater could pose a public health threat. Site groundwater also poses a threat to the New Jersey Pinelands which is a sensitive ecosystem and a major groundwater recharge area.



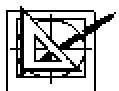
Cleanup Approach

The site is being addressed in two Operable Units (OUs). OU1 addressed the removal of buried drums and moderately to heavily contaminated soils. OU2 addresses the cleanup of Site groundwater and residually contaminated soils.

Response Action Status



Immediate Actions: At EPA's direction, the potentially responsible parties (PRP's) installed a security fence in 1988, to keep trespassers and children from becoming exposed to Site contaminants.



Buried Drums and Soil: In 1988, the EPA selected the cleanup methods to be used to remove contaminated soils and buried drums. Construction of an access route to the Site was completed in November 1992. During the design phase for drum removal, EPA learned the bulk of soil contamination was closely associated with the drum disposal areas. In July 1994 EPA modified the first cleanup phase to include excavation of moderately to highly contaminated soils. This action also modified the second remedial phase to deal with groundwater cleanup and residually contaminated soils. Phase one, the design for drum removal activities, was completed in July 1994, followed by on-Site mobilization in the Spring of 1995. Cleanup activities then proceeded in August of 1994, which included: excavation of drums and associated soil; evaluation of wastes to determine proper treatment/disposal methods for collection and grouping of waste materials and soil with off-Site incineration; off-Site treatment and/or disposal of all waste material and soil determined to be inappropriate for incineration at permitted facilities; and monitoring air and groundwater during the cleanup activities. Drums and soils excavation work was completed in July 1995.



Ground water: In 1989, the cleanup plan covering contaminated groundwater and lesser contaminated soil was selected by EPA. In July 1994, EPA included the cleanup of moderately to heavily contaminated soil as part of the drum removal phase of work. The selected groundwater remedy is to extract, treat, and discharge the treated effluent to the upper sand aquifer at the site. After the aquifer has been restored to health based levels, the site will be restored and continued environmental monitoring. Design of the groundwater cleanup remedy was initiated in August of 1995, immediately following the removal of buried drums and associated soils. The design of the groundwater remedy was completed in late 1998. This was followed by the construction of the remedial extraction, treatment and recharge system in February 1999. Beginning in March 1999, the entire system underwent an extensive six month period of rigorous tests. First, clean water was run through the system, followed by progressively contaminated water until it was demonstrated that the system was consistently able to meet its required cleanup standards. In September 1999, the remedial system entered the long term operation and maintenance phase.

In early 2003, the PRPs began evaluating the extraction and treatment system for the purpose of more rapidly achieving the final cleanup goals. To this end, a pilot program is currently underway to test a dual phase (liquid/vapor) extraction technology on hot spot areas containing residuals soils contamination. Once the results of this study have been analyzed, a decision will be made as to whether to implement the technology on a wider scale., to clean-up the remaining hot-spots. In addition, in the spring of 2004, the PRPs will excavate one hot spot area of approximately 1000 cubic yards for off-site disposal.

Presently, it is currently anticipated that the extraction and treatment system will operate for approximately 7 more years, or until contaminated groundwater is restored to health based levels.

Site Facts: The EPA has identified approximately 30 PRPs. Nineteen parties were ordered by EPA to remove contaminated materials and buried drums. The parties completed the removal of the buried drums and contaminated soil in mid-1995 under the terms a Unilateral Administrative Order. A Unilateral Administrative Order for Operable Unit Two was issued in May 1995, outlining Remedial Design and Remedial Action (RD/RA), which includes the design, construction and cleanup phase of work. The PRPs are currently operating the groundwater treatment plant, and conducting routine operation and maintenance (O&M) activities, which includes environmental and groundwater monitoring sampling. The PRPs performed all the above outlined activities under EPA and NJDEP oversight.

Cleanup Progress (Threats Mitigated by cleanup Progress)

Installation of a security fence has reduced the potential for contact with contaminants while the chosen remedies are being implemented. Approximately 3,800 buried drums and their contents, which varied from intact to completely disintegrated, were excavated and removed for off-Site disposal. In addition, approximately 22,000 cubic yards (or 14,000 tons) of associated moderately to highly contaminated soils were removed. A small on-Site wetland area has also been restored. The design of the groundwater extraction, recharge and treatment system was completed in late 1997, construction began in early 1998, and was completed in late 1998, followed by six months of testing. Full scale operation of the system commenced in March 1999. In September 1999, the system entered the long term operation and maintenance phase. It is anticipated that the remedial system will continue to operate for approximately 7 more years, or until contaminated groundwater is restored to health based levels.

In addition, The EPA is presently in the process of conducting the first five-year review of the remedies addressing the surficial and subsurface clean-up at the site. The purpose of the five-year review is to ensure that the remedies implemented for the site continue to be protective of public health and the environment and are functioning as designed. Once the five year review is completed (end of September 2004), the results will be made available in the site repository.